

REMARKS

In this preliminary amendment, Claims 1 to 22 have been cancelled and new Claims 23 to 51 have been added. The application now includes Claims 23 to 51 with Claims 23, 35 and 45 being the only independent claims. Favorable reconsideration, in view of the above amendments and accompanying remarks, is respectfully requested.

As amended, Claim 23 now defines the invention as a method for producing a new brake shoe for use in a drum-in-hat disc brake assembly to increase the green static coefficient of friction between the new brake shoe and a cylindrical braking surface of a rotor of the drum-in-hat disc brake assembly before any burnishing or other contact/wear of the brake shoe and the braking surface of the rotor has occurred, the method comprising the steps of: (a) providing a new brake shoe including a friction lining having an outer surface having surface irregularities; (b) applying a liquid binder material to at least a portion of the outer surface of the friction lining of the brake shoe; and (c) applying an abrasive particle coating material to at least a portion of the outer surface of the friction lining of the brake shoe to at least partially fill in the surface irregularities thereof and thereby increase a contact area between the outer surface of the friction lining and the cylindrical braking surface of the rotor thereby increasing the green static coefficient of friction between the new brake shoe and braking surface of the rotor before any burnishing or other wear of the brake shoe and the braking surface of the rotor has occurred. As will be discussed below, none of the cited references, alone or in combination, discloses or suggests such a method for producing a brake component as recited in Claim 23.

The Examiner in the Advisory Action dated December 2, 2005, notes that “contrary to applicants arguments, Parker discloses the use on brake shoes (see column 2, lines 15-16). That portion of Parker at col. 2, lines 12-16 discloses that “In order to accomplish the objectives of the invention . . . a brake friction pad [is] coated in accordance the inventive method to produce a protective layer upon the associated rotor or like element (e.g., brake shoe).” However, the like element being “e.g., brake shoe” does not make sense. Parker’s method requires that a *highly heat conductive*

coating material, such as copper, or other materials of relative consistency or *softness*, be first applied to the brake pad in the manner disclosed in the patent. Then, during a dynamic brake application, the coating will be transferred to the surface of the rotor by the pressure and heat generated during application of the brake pad to the rotor and will result in forming the protective layer upon the rotor by filling in grooves, pits and other surface imperfections on the rotor surface with just a few applications of the brake pad to the rotor. (See col. 2, lines 29-36) Also, it is noted that Parker also discloses at col. 5, lines 14-16, that “Alternatively, the coating may be applied to the rotor and result in rotor surface smoothing under the same principles discussed above.” However, there is no disclosure or suggestion in Parker to apply the coating to the rotor so that a protective layer is formed on the brake pad during a dynamic brake application. Thus, the “like element” cannot be a “brake pad” according to the teachings of Parker. Assuming the like element can be a brake pad, Parker would still not disclose or suggest a method of producing a *new brake shoe for use in a drum-in-hat disc brake assembly to increase the green static coefficient of friction between the new brake shoe and a cylindrical braking surface of a rotor of the drum-in-hat disc brake assembly before any burnishing or other contact/wear of the brake shoe and the braking surface of the rotor has occurred*, the method comprising the steps of: (a) providing a new brake shoe including a friction lining having an outer surface having surface irregularities; (b) applying a *liquid binder material* to at least a portion of the outer surface of the friction lining of the brake shoe; and (c) applying an *abrasive particle coating material* to at least a portion of the outer surface of the friction lining of the brake shoe to at least partially fill in the surface irregularities thereof and thereby *increase a contact area between the outer surface of the friction lining and the cylindrical braking surface of the rotor thereby increasing the green static coefficient of friction between the new brake shoe and braking surface of the rotor before any burnishing or other contact/wear of the brake shoe and the braking surface of the rotor has occurred*, as recited in Claim 23. (Emphasis added) Accordingly, it is believed that Claim 23, along with dependent Claims 24 to 34, are patentable over the cited references.

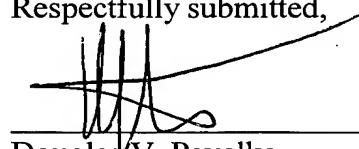
Independent method Claim 35 contains similar limitations to that of method Claim 23 and *further recites* in step (b) applying an *inorganic* liquid binder material to at least a portion of the outer surface of the friction lining of the brake shoe and that the inorganic liquid binder material is a *silicate binder* and the abrasive particle coating material is *selected from the group consisting of iron oxide powder (Fe_2O_3); aluminum oxide powder (Al_2O_3); zircon powder; and calcium oxide powder ($CaCO_3$)*. (Emphasis added). Clearly, none of the prior art of record discloses or suggests, alone or in combination, these further limitations recited in Claim 35. Thus, it is further believed that Claim 35, along with dependent Claims 36 to 44, are patentable over the art of record.

Independent product Claim 45 includes limitations similar to those recited in method Claim 23 but is directed to the brake shoe product and recites that the new brake shoe includes a friction lining having an outer surface having surface irregularities; a *liquid binder material* applied to at least a portion of the outer surface of the friction lining of the brake shoe; and an *abrasive particle coating material* applied to at least the portion of the outer surface of the friction lining of the brake shoe to at least partially fill in the surface irregularities thereof and thereby increase a contact area between the outer surface of the friction lining and the cylindrical braking surface of the rotor thereby *increasing the green static coefficient of friction between the new brake shoe and braking surface of the rotor before any burnishing or other contact/wear of the brake shoe and the braking surface of the rotor has occurred*. (Emphasis added). Clearly, as discussed above, none of the prior art of record discloses or suggests, alone or in combination, the limitations recited in Claim 45. Thus, it is believed that Claim 45, along with dependent Claims 46 to 51, are patentable over the art of record.

In view of the above amendments and accompanying remarks, it is believed that the application is in condition for allowance. However, if the Examiner does not believe that the above remarks and amendments place the application in condition for allowance, or if the Examiner has any comments or suggestions, it is requested that the Examiner contact Applicants' attorney at (419) 255-5900 to discuss the application

prior to the issuance of any action in this case by the Examiner.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'DP', is written over a horizontal line.

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